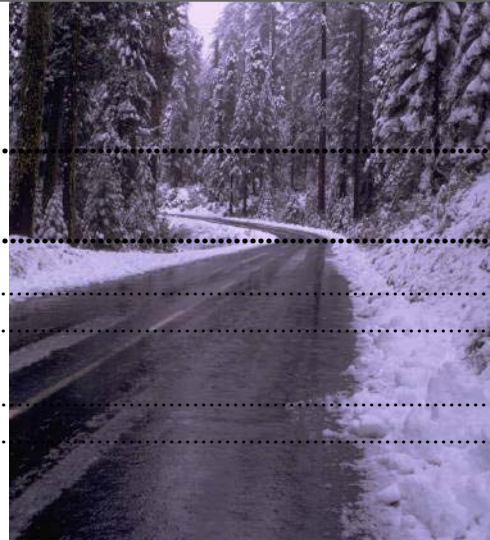


Chapter 3

Describing the Situation

Table of Contents

THE ANALYSIS AREA	8
THE NATIONAL FOREST TRANSPORTATION SYSTEM	8
<i>General Description.....</i>	<i>8</i>
<i>Meeting Forest Plan Objectives.....</i>	<i>10</i>
<i>Federally Designated Forest Highways, and Scenic Byways.....</i>	<i>11</i>
<i>Budget.....</i>	<i>12</i>



List of Tables

Table 3-1. Objective Maintenance Level 1 and 2 (collectors) and 3, 4, and 5 Roads (USFS Jurisdiction) by Ranger District (miles)	10
Table 3-2a. Operational Levels of National Forest System Roads (UFSF Jurisdiction): Arterial and Collectors (miles)	11
Table 3-2b. Objective Maintenance Levels of National Forest System Roads (UFSF Jurisdiction): Arterial, Collector and Local (miles)	11
Table 3-3. Summary of Needed Funds for Road Maintenance and Operations for Primary Transportation System.....	12

The Analysis Area

The Umatilla National Forest (about 1.4 million acres) is located in northeast Oregon and southeast Washington (Figure 1). Tribal, federal, state, and county road systems connect the areas.

Assessment of Forest-scale road impacts requires general consideration of the physical characteristics of climate, geology, and topography. The north half of the Forest has a marine-influenced climate with average annual precipitation ranging from 30-65 inches. Winter conditions often include rain mixed with snow in mid elevations (2000-4500') as a result of moist marine air intrusions. Basic geology is dominated by Columbia River basalt flows, which have been uplifted and dissected, forming gentle upland plateaus, narrow ridges, steep slopes and confined, narrow valleys. Watersheds of the Lower Snake are deeply incised, and moderately dissected. In contrast, the south half of the Forest has a more continental climate, with annual precipitation ranging from 20-55 inches, and colder winters dominated by snow. Geology is more complex and includes Columbia River basalts in some areas overlying older John Day volcanics and intrusive granitics. The southeast part of the Forest has the highest elevations (up to 8000'), with glaciated landforms, and areas of landslide deposits. Landforms are more complex with rolling mountain ridges, separated by steep canyons. Watersheds on the south half of the Forest are moderately incised, and moderately dissected.

Most of the 1,423 miles of OpML 3-5 and OpML 1-2 collector roads are gravel surfaced (1037 miles). The remainder is broken down as follows: 200 miles are native surfaced, 78 miles are paved, and 108 miles are improved.

A prominent transportation feature is Interstate 84 that transects the middle portion of the Forest and transports large numbers of recreationists, travelers, and commercial traffic. US 395 accesses most of the southern part of the Forest, and US HWY 12 parallels the western edge of the north half of the Forest. Both of these highways are tributary to Interstate 84.

Numerous motorized (ATV and motorcycle) and non-motorized (hiking, biking, and equestrian) trails can be found throughout the Forest. Recreationists use the road and trail system in summer, fall, and spring for sight seeing, hiking, ATV use, dispersed camping, fishing, and hunting.

The National Forest Transportation System

General Description

The transportation system on the Umatilla National Forest serves a variety of resource management and access needs. Most roads on the Forest were originally constructed for commercial purposes including grazing, timber, and mineral extraction. Over the past 100 years, an extensive road network has been developed, serving commercial, recreation, and administrative purposes while also providing access to private lands.

There are currently 6,846 miles of classified¹ forest roads on the Umatilla National Forest Transportation System. The Forest has jurisdiction for 4,957 miles while approximately 1,889 miles have county, state, BLM, or private jurisdiction. The four Ranger Districts: Heppner, Pomeroy, North Fork John Day, and Walla Walla, share management of the road system. There are public roads with state and county jurisdiction within each of the Ranger Districts.

National forest system (NFS) roads are maintained to varying standards depending on the level of use and management objectives. Roads may currently be maintained at one level with plans for maintenance at a different level at some future date. The operational maintenance level (OpML) is the maintenance level currently assigned to a road considering today's needs, road condition, budget constraints, and environmental concerns. In other words, it defines the level to which the road is currently being maintained. The objective maintenance level (ObML) is the maintenance level to be assigned at a future date considering future road management objectives, traffic needs, budget constraints, and environmental

¹ Classified roads are wholly or partially within or adjacent to NFS lands that are determined to be needed for long-term motor vehicle use, including state roads, privately owned roads, NFS roads, and other roads authorized by the Forest Service.

concerns. The objective maintenance level may be lower, the same as, or higher than the operational maintenance level (Table 3-2a, b). The transition from operational maintenance level to objective maintenance level typically depends on reconstruction, or decommissioning. There are five maintenance levels used by the Forest Service to determine the work needed to preserve the investment in the road. These maintenance levels as described in *Forest Service Handbook (FSH) 7709.58 – Transportation System Maintenance Handbook* are as follows:

Level 1: Assigned to intermittent service roads during the time they are closed to vehicular traffic. The closure period must exceed one year. Basic custodial maintenance is performed to keep damage to adjacent resources to an acceptable level and to perpetuate the road to facilitate future management activities. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur at this level.

Roads receiving level 1 maintenance may be of any type, class, or construction standard, and may be managed at any other maintenance level during the time they are open for traffic. However, while being maintained at level 1, they are closed to vehicular traffic, but may be open and suitable for non-motorized uses.

Level 2: Assigned to roads open for use by high clearance vehicles. Passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or other specialized uses

Level 3: Assigned to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material.

Level 4: Assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double lane and aggregate surfaced. However, some roads may be single lane. Some roads may be paved and/or dust abated.

Level 5: Assigned to roads that provide a high degree of user comfort and convenience. These roads are normally double lane, paved facilities. Some may be aggregate surfaced and dust abated.

Approximately 17 percent (821 miles) of Umatilla National Forest roads are managed (OpML) and maintained for public use with low-clearance vehicles (passenger cars). These roads carry more traffic and are the most costly to maintain to standard. Table 3-1 summarizes the miles of collectors (level 1 and 2) and those roads under Forest Service jurisdiction (level 3, 4, 5).

Table 3-1. Objective Maintenance Level 1 and 2 (collectors) and 3, 4, and 5 Roads (USFS Jurisdiction) by Ranger District (miles).

Maintenance Level	Heppner	Pomeroy	North Fork John Day	Walla Walla	Forest Total
1	28	7	42	39	116
2	92	6	141	125	364
3	113	151	230	150	644
4	0	19	80	91	190
5	8	9	50	41	108
Total	241	192	544	446	1,423
% of Total	17	13	38	31	100

The remaining 3,518 miles of inventoried NFS roads either have restrictions on motorized vehicle traffic use (maintenance level 1) or are managed for high-clearance vehicles such as pickup trucks and four-wheel drive vehicles (maintenance level 2). These roads are single-purpose, low volume roads, normally single-lane and 2,125 miles are un-surfaced.

Many routes on NFS land are not recognized as part of the transportation system. An estimate of 300 miles is used on the Umatilla. The majority of these routes have been created by off-road vehicle traffic. Some of these routes were once classified system roads that the Forest attempted to decommission; use is still occurring on routes where such efforts were unsuccessful. Management decisions on whether or not to include these routes as part of the transportation system or to decommission or restrict them from further use will be made at the watershed or project scale.

The focus of this forest-scale roads analysis is the Forest's primary transportation system. This system is predominately the 19 percent of roads that are objective maintenance level 3, 4 and 5. Roads not included in the 20 percent that still function as an integral part of the Forest's transportation system include maintenance level 1 and 2 collectors, which are included in this analysis.

Meeting Forest Plan Objectives

Arterials and collectors are the roads used to provide primary access to large portions of NFS lands. Arterials normally serve as connections between towns, major county roads, or state highways and are main thoroughfares through the Forest. Collectors link large areas of the Forest to arterials or other main highways.

As a goal, the Umatilla Forest Plan set the standards and guidelines for the Forest's transportation system - Provide and manage a safe and economical road ... system and facilities needed to accomplish the land and resource management and protection objectives on the Umatilla National Forest. The Forest Plan anticipated quite a bit more road development than has actually occurred.

Table 3-2a. Operational Levels of National Forest System Roads (UFSF Jurisdiction): Arterial and Collectors (miles)

Maintenance Level	Arterial	Collector	Local	Total
1	0	65	8	73
2	24	493	11	528
3	183	325	36	544
4	200	0	0.3	200
5	72	2	3	77
Total miles	479	885	58	1422
Percent of Total	34%	62%	4%	100%

Table 3-2b. Objective Maintenance Levels of National Forest System Roads (UFSF Jurisdiction): Arterial, Collector and Local (miles)

Maintenance Level	Arterial	Collector	Local	Total
1	0	107	9	116
2	17	337	11	365
3	172	438	34	644
4	188	0	2	190
5	103	2	3	108
Total miles	480	884	59	1423
Percent of Total	34%	62%	4%	100%

Federally Designated Forest Highways, and Scenic Byways

The analysis area contains a number of Forest Highways designated under the Public Lands Highways program of the Transportation Equity Act for the 21st Century (TEA21). These routes are state or county owned roads qualifying for federal funding for improvement or enhancement. They provide access to and within the national forest. Currently these roads are under review, and a new list will be developed.

Forest Highway funding can be used for planning, design, and construction or reconstruction of these designated routes. Other work can include enhancements, such as parking areas, interpretive signing, acquisitions of scenic easements or sites, sanitary and water facilities, and pedestrian and bicycle paths. The Umatilla National Forest has made good use of the Forest Highway Program, in conjunction with the States of Oregon and Washington, and many counties.

Creation and maintenance of scenic byways under the Oregon Scenic Byways Program is a 'grassroots' effort. Residents, businesses and agencies that are interested in preserving and enhancing local scenic roads, diversifying the local economy, and/or promoting tourism opportunities are encouraged to apply.

The Umatilla National Forest has one State of Oregon-designated Scenic Byway, the Blue Mountains Scenic Byway. This 130-mile long Byway starts on Interstate 84, west of Arlington, Oregon, and ends 20 miles north of Sumpter, Oregon. Approximately 53 miles of the Byway (Forest Roads 52 and 53) are under Forest Service jurisdiction. Funding for maintenance of the Byway is a priority for the Forest.

Budget

The Forest budget allocation for planning, construction, and maintenance of roads averaged \$1,400,000 per year from 1997 to 2001. The annual cost to maintain the entire road system to standard is considerably higher than the amount allocated by Congress. In prior years, congressionally appropriated road funding was supplemented by road construction and maintenance work performed by timber purchasers through the commercial timber sale program. This program has declined steadily over the last decade.

From 1999 through 2003, the Forest has conducted road condition surveys to determine the annual cost of maintaining the road system to the assigned objective maintenance level. Road maintenance needs were also recorded to determine the cost of road maintenance deferred in previous years due to lack of funding. Finally, road improvement work necessary to bring the roads up to the desired objective was identified and documented. As part of this roads analysis, the data was used to determine Forest Service budget needs for the primary transportation system. The numbers found in the table below demonstrate the need for additional funding.

Table 3-3. Summary of Needed Funds for Road Maintenance and Operations for Primary Transportation System.

Total Miles	Annual Maintenance		Deferred Maintenance		Capital Improvements	
	\$/mile	Total \$	\$/mile	Total \$	\$/mile	Total \$
780	\$712	\$555,619	\$26,968	\$21,035,398\$	\$11,714	\$9,137,283